

8094

Diag. Cht. No. 78-4

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic Shoreline

Field No. _____ Office No. T-8094

LOCALITY

State Virginia

4

DATA RECORD

T- 8094

Quadrangle (II): Chester, Virginia
(U.S.G.S.) (7 $\frac{1}{2}$ minute)

Project No. (II): CS-283

Field Office:

Air Photographic Party No. 2

Chief of Party: ~~Fred. L. Peacock~~ Henry O Fortin

Compilation Office:

Baltimore Photogrammetric Office

Chief of Party: Fred. L. Peacock

Instructions dated (II III):

March 26, 1942 - July 15, 1942

Sept. 30, 1942 - Nov. 14, 1942, Nov. 24, 1942

Copy filed in Descriptive

Report No. T- (VI)

Div of Photogrammetry
Office Files

Completed survey received in office: 9-15-44

Reported to Nautical Chart Section: 9-22-44

Reviewed: 12-9-48

Applied to chart No. 531

Date: 2-4-47

Redrafting Completed: 2-21-50

Registered: 7-12-50

Published:

Compilation Scale: 1:10,000

Published Scale:

Scale Factor (III): None

Geographic Datum (III): N.A. 1927

Datum Plane (III): ~~Mean Sea Level~~ MHW

Reference Station (III): TT 12T Also 754 (U.S.G.S.), 1937

Lat.: 37°15' 42.96" 1324.4
(525.3)

Long.: 77°29' 11.98" 295.2

Adjusted
(1183.2) ~~unadjusted~~

State Plane Coordinates (VI): Virginia-South

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
7518 - 7521	11/25/41	11:12 A.M.	1:10,000	2.5' above M.L.W.
7496 - 7497	11/25/41	10:53 A.M.	1:10,000	2.6' above M.L.W.

Tide from (III); Predicted Tables, Reference Station - Washington, D. C.
with correction for Petersburg, Appomattox River, Virginia.

Mean Range: 2.9' Spring Range: 3.3'

Camera: (Kind or source) U.S.C.G.S. Nine lens camera (focal length - $8\frac{1}{4}$ ").
All negatives on file in Washington Office.

Field Inspection by: Lieut. Comdr. Henry O. Fortin date: Season of 1943

Field Edit by: None date:

Date of Mean High Water Line Location (III): Date of photographs, supplemented
by field inspection data obtained in 1942-1943. Season's Field Inspection
Reports previously submitted.

Projection and Grids ruled by (III) J.T.B. - B.R.C. date: May 4, 1944

" " " checked by: B.R.C. date: May 4, 1944

Control plotted by: James E. Sunderland, A. C. Rauck, Jr. date: 5-19-44, Aug. 7, 1944

Control checked by: H. R. Rudolph, J. E. Deal, Jr. date: 5-23-44, Aug. 7, 1944

Radial Plot by: J. E. Deal, Jr., A. C. Rauck, Jr. date: Aug. 7 to 14, 1944

Detailed by: John M. Reinoldi date: 8-21-44 to 9-8-44

Reviewed in compilation office by: Harold R. Brooks date: 9-6-44 to 9-13-44

Elevations on Field Edit Sheet
checked by: None date:

STATISTICS (III)

Land Area (Sq. Statute Miles): This Map Drawing includes shoreline and adjacent planimetry: only.

Shoreline (More than 200 meters to opposite shore): None.

Shoreline (Less than 200 meters to opposite shore): 15.4 Statute Miles.

Number of Recoverable Topographic Stations established: 3

Number of Temporary Hydrographic Stations located by radial plot: 30

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by,

(II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname

and initials (not initials only).

Remarks;

Field Inspection

Field inspection data for the area of T-8094 are contained in the "Report on Field Inspection of Air Photographs, James River and Tributaries, Virginia" by Henry O. Fortin, dated April 20, 1943.

Filed in the Division of Photogrammetry, General Files.

26 CONTROL:

There are no United States Coast and Geodetic Survey horizontal control stations within the limits of this Map Drawing.

The following horizontal control stations fall within the limits of this Map Drawing. They are:

United States Geological Survey Monumented Traverse Stations:

TT 12T Also 754, 1937, r. 1942

TT 11T, 1937 Also 724, 1937, r. 1942

United States Geological Survey Temporary Traverse Stations, all established in 1937 and recovered in Season of 1942-1943, namely: See Review Report

879	1084+	713A
1081+	782+	607+
869	836	634
885	608+	593A
774A	737+	597
779	761+	610+, 1937
910+, 1937	601A, 1937	748A, 1937
915+, 1937	603A, -844A, 1937	755+, 1937
586A, 1937	606+, 1937	784+, 1937
788+, 1937	861+, 1937	

The following United States Geological Survey Temporary Traverse Stations, established in 1937 and recovered in Season of 1942-1943 fall just outside the limits of this Map Drawing. They are:

704	829
823	586-A

27 RADIAL PLOT:

The radial plot for this Map Drawing is part of the combined radial plot for Surveys Nos. T-8089, T-8090, T-8091, T-8094, T-8095, and T-8096, the Descriptive Report for which was submitted to the Washington Office on September 1, 1944. Filed in Div. of Photogrammetry General Files

28 DETAILING:

In accordance with Instructions, dated March 26, 1942, the shoreline and adjacent planimetry only, of that portion of the James River and its tributaries falling within the area of this Map Drawing, has been detailed.

The shoreline and immediate adjacent culture of the part of the Appomattox River detailed on this Map Drawing has been detailed according to the Director's letters dated March 26, 1942, July 15, 1942, and September 30, 1942, pertaining to Project CS-283. Filed in Div. of Photogrammetry, Office Files

Positions of minor detail points, temporary hydrographic stations and recoverable topographic stations were determined by the usual radial line method.

The shoreline data furnished the Compilation Office by the Field Inspection Unit were transferred to the office photographs. These data were then detailed on the Map Drawing.

A considerable portion of the shoreline of Swift Creek, for which there was no field inspection data, was delineated from the nine lens office photographs with the aid of the stereoscope. Areas adjacent to the shoreline were detailed in accordance with field inspection data and office examination of the nine lens photographs.

The number of nine lens photographs covering the area of this Map Drawing were sufficient for detailing. The scales of the photographs and of this Map Drawing were in good agreement.

Portions of the Mean High-Water Line (heavy line, firm ground) along the Appomattox River and Swift Creek, which could not be definitely identified by the Field Inspection Unit were shown on the field inspection photographs by red dashed lines. These undetermined sections of shoreline were delineated, with the aid of the stereoscope, from the nine lens office photographs. It is believed that the position of the Mean High-Water Line in these areas, as shown on the Map Drawing, has been accurately determined by the compiler.

29 SUPPLEMENTAL DATA:

No supplemental data were furnished the Compilation Office for use in detailing this Map Drawing.

30 MEAN HIGH-WATER LINE:

Full heavy weight and light weight black acid ink lines have been used to differentiate between the Mean High-Water Line and outer limits of marsh bordering the Mean High-Water Line, respectively. The light

30 MEAN HIGH-WATER LINE: (Cont'd.)

weight line is not considered to be the Mean High-Water Line, but is only an indication of the outer limits of low wet land at Mean High-Water.

31 LOW-WATER AND SHOAL LINES:

No Mean Low-Water Line has been shown on this Map Drawing and none was indicated by the field inspection data or visible on the nine lens photographs.

There are no shoal areas indicated by field inspection data or visible on the photographs within the limits of this Map Drawing.

32 DETAILS OFFSHORE FROM MEAN HIGH-WATER LINE:

Six areas containing logs covered at Low-Water, and one area containing the remains of bridge pilings are shown on this Map Drawing, offshore from the Mean High-Water Line. No data were available to the Compilation Office of the extent to which these offshore details bare or cover.

33 WHARVES AND SHORELINE STRUCTURES:

There are two catwalks, three jetties and one pier appearing in the area of this Map Drawing. No additional shoreline structures were indicated by field inspection data or visible on the office photographs.

34 LANDMARKS AND AIDS TO NAVIGATION:

There are no fixed aids to navigation within the limits of this Map Drawing.

No objects were recommended for charting as landmarks within the limits of this Map Drawing.

35 HYDROGRAPHIC CONTROL:

The Compilation Office was furnished the identification of thirty temporary hydrographic stations and three recoverable topographic stations. These were identified on the 1:10,000 field photographs by numbers and their descriptions listed in a field sketch book (Form No. 274) by corresponding numbers. These stations were transferred to the 1:10,000 office photographs and radially plotted on the Map Drawing.

The numbers and descriptions of these stations have been noted near

35 HYDROGRAPHIC CONTROL: Cont'd.

the station to which they refer, directly on the Map Drawing.

Form No. 524 is being submitted for the three recoverable topographic stations. They are:

*Filed in Div.
Photogr. General Files.*

~~CONCRETE CHIMNEY, 1943~~
~~W. GABLE OF GALVANIZED BUILDING, 1943~~
~~FLAGPOLE ON N.W. GABLE OF BOAT HOUSE, 1943~~

36 LANDING FIELDS AND AERONAUTICAL AIDS:

No aeronautical aids have been recommended by the Field Inspection Unit.

There are no landing fields within the area of this Map Drawing.

37 JUNCTIONS:

Satisfactory and complete junction has been made to the east with Map Drawing, Survey No. T-8091.

To the north is Map Drawing for Survey No. T-8095. There is no shoreline detail, at the junction, between Map Drawing, Survey No. T-8095 and Map Drawing, Survey No. T-8094.

There is no contemporary survey to the west.

Junction will be made with the contemplated Map Drawing, Survey No. T-8093 to the south when the compilation for that Map Drawing is started.
Junction checked during review.

38 GEOGRAPHIC NAMES: *Approved list filed in the Geographic Names Section.*

No geographic name investigation has been made for the area of this Map Drawing. The geographic names shown on this Map Drawing have been taken from the only sources available to the Compilation Office, namely: Nautical Chart No. 531, James River and Appomattox River, published at Washington, D. C., August 1940, reissued March 6, 1944, scale 1:20,000, and the United States Geological Survey Chester, Virginia, seven and a half minute Quadrangle, edition of 1944. A list of these names, which are believed by the Compilation Office to be undisputed, are attached to this Descriptive Report.

39 HORIZONTAL ACCURACY:

The probable error in the relative positions of detail points, the Mean High-Water Line, and well defined objects, is believed to be within the limits of satisfactory accuracy.

40 RECOMMENDATIONS FOR FUTURE SURVEYS:

The shoreline, roughdraft, Map Drawing, Survey No. T-8094, is believed to be complete in all details for charting and no other surveys are deemed necessary.

41 BRIDGES:

Four bridges across Swift Creek have been shown on the Map Drawing with the conventional symbol. All of these bridges are located at points beyond the limits of navigation of the creek.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLE:

Comparison was made with the United States Geological Survey, Chester, Va., 15 minute Quadrangle, edition of 1944, scale 1:31,680.

Common topographic features are in general fair agreement.

45 COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Nautical Chart No. 531, Appomattox River, Scale 1:20,000, published at Washington, D. C., August 1940, and reissued March 6, 1944, and the following differences noted:

Between latitude $37^{\circ} 15'$ and $37^{\circ} 16'$, the three courses of the Appomattox River shown on the Map Drawing are more narrow and the shoreline more regular in contour than shown on the Nautical Chart.

At latitude $37^{\circ} 16.4'$ and longitude $77^{\circ} 22.6'$, there is a marsh island which does not appear on the Nautical Chart.

At approximate latitude $37^{\circ} 16.1'$ and longitude $77^{\circ} 22.5'$, the cove at this location is larger in area but has a smaller inlet than shown on the Nautical Chart.

A large marsh island and a small marsh island shown on the Chart in the Appomattox River between latitudes $37^{\circ} 15'$ and $37^{\circ} 16'$, is shown as one large marsh island on the Map Drawing in accordance with field inspection data and office examination of the photographs.

There are no recent Nautical Charts, available to the Compilation Office, showing Swift Creek.

Respectfully Submitted:
September 13, 1944

John M. Reinoldi
John M. Reinoldi,
Sr. Photogrammetric Aid

Compilation and Descriptive
Report, Reviewed By:

Harold R. Brooks
Harold R. Brooks,
Sr. Engineering Aid

Compilation of Map Drawing
Supervised By:

J. Edward Deal, Jr.
J. Edward Deal, Jr.,
Asst. Photogrammetric Engineer

Approved and Forwarded:
September 15, 1944

Fred. L. Peacock
Fred. L. Peacock
Chief, Air Photographic Party No. 2

T 8094

GEOGRAPHIC NAMES

Undisputed

- ✓ • Atlantic Coast Line Railroad ✓
- ✓ • Appomattox River ✓
- ✓ • Archer Bluff ✓
- ✓ • Branders Bridge ✓
- ✓ • Halls Island ✓
- ✓ • Lakeview ✓
- ✓ • Old Town ~~Chowan~~ Creek ✓
- ✓ • Swift Creek ✓
- ✓ • Tinsbury Creek ✓
- ✓ • U.S. 1/301 ✓
- ✓ • Seaboard Air Line ✓
- ✓ • Old North Channel ✓

Names preceded by •
are approved 12/6/48
L.H.

Descriptions of Photo-Hydro Stations
T-8094

- 569 - Tip of grass on E. side of entrance to stream.
570 - Tip of grass on SW. side of entrance to brean in swamp.

- break in marsh.
572 - Tip of grass at forks.
573 - Tip of grass.
574 - Tip of grass at forks.
575 - Tip of grass on S. end of island.
576 - Tip of grass.
578 - NW. tip of island.
579 - Tip of grass on NW. side of entrance to cut around island.
580 - Center of 5 ft. mound covered with briars and bushes,
just off point.
581 - Tip of wooded point.
582 - Stump, 12 ft. on gravel bank.
582A- South end of gravel bank.
584 - Point of grass on NW. side of entrance to stream.
585 - Tip of grass on W. side of entrance to small stream.
587 - Tip of grass on N. end of island.
606 - Tip of grass on SW. side of entrance to deep ravine.

Approved by:

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Chief, Nautical Chart Branch,
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